

Attorney Docket No. 23100.65  
Customer No. 000027683

**III. Remarks**

**A. Status of the Application**

Claims 1-24 are pending herein. Claims 1-4 and 9-24 have been withdrawn from consideration. Claims 5-8 are under examination. Reconsideration of claims 5-8 in light of the above amendments and the following remarks is respectfully requested.

**B. Election/Restrictions**

Applicants acknowledge and appreciate the withdrawal of the election of species requirement regarding claim 5.

**C. Rejection under 35 U.S.C. §102(b)**

Claims 5-7 stand rejected under 35 U.S.C. §102(b) over Bradbury, A.G.W., et al., Colloque Scientifique International sur le Café, 1988, 12:265-269, entitled: "Polysaccharides in green coffee beans" (hereinafter referred to as "Bradbury"). This rejection is respectfully traversed.

It is noted that the cover page of the Office action dated August 25, 2005 indicates that claims 5-8 are rejected. In addition, the Examiner's comments regarding the claimed subject matter are directed to claims 5-8. Accordingly, it appears that the Examiner may have intended to apply the rejection under 35 U.S.C. §102(b) over Bradbury to claims 5-7 and 8. The following remarks regarding the inappropriateness of the rejection over Bradbury will be treated as if the rejection was made with respect to claims 5-8.

As provided in MPEP §2131, "[t]o anticipate a claim, the reference must teach every element of the claim...." Therefore, Bradbury must disclose all of the elements of claims 5-8 to sustain the rejection under 35 U.S.C. §102(b). However, Bradbury does not meet the standard required by MPEP § 2131 because Bradbury does not disclose or suggest each and every element of independent claim 5, or the claims dependent thereon.

Specifically, independent claim 5 is directed to a dietary supplement composition that includes: (a) a nutritionally effective amount of isolated and purified acetylated mannose; and (b) at least five isolated and purified saccharides selected from: galactose, glucose, mannose,

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xylose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, arabinose, glucuronic acid, galacturonic acid, iduronic acid and arabinogalactan. Claims 6-8 depend from and include all of the subject matter of claim 5 and further require, respectively, that the at least five isolated and purified saccharides are powdered, are essential saccharides or further comprise glucosamine and rhamnose.

According to the Office action, the Examiner states that Bradbury teaches a composition comprising nutritionally effective amounts of isolated and purified saccharides of acetylated mannose, mannose, galactose, glucose, xylose, arabinose, arabinogalactan and rhamnose. There is absolutely no basis for the Examiner's statements regarding the content of the disclosure of Bradbury.

Bradbury reports the results of a study conducted to characterize the whole polysaccharide fraction of certain green coffee beans. As noted in the "Introduction" section on page 265 of Bradbury, ground green coffee beans were extracted to remove lipids and sugars, were solubilized in 4-methyl morpholine N-oxide (an N-oxide solvent) and a linkage fingerprint of the polysaccharide fraction was obtained by methylation analysis according to the Hakimori methylation procedure.

In the "Results and Discussion" section on page 266 of Bradbury, it is reported that following acid hydrolysis and analysis by gas chromatography, the coffee beans studied in Bradbury were found to include mannose, galactose, glucose and arabinose as well as small quantities of rhamnose and xylose.

Also, in the "Results and Discussion" section on page 266 of Bradbury, it is reported that the Hakimori methylation procedure results in the conversion of hydroxyl groups on the monosaccharide residues into methyl ethers and that subsequent hydrolysis gave a mixture of partially methylated monosaccharides which were identified by gas chromatography-mass spectrometry.

Finally, in the "Results and Discussion" section on page 268 of Bradbury, it is noted that an arabinogalactan rich preparation was obtained by alcohol precipitation from aqueous, protease containing extracts of Robusta green beans.

Accordingly, Bradbury discloses that the polysaccharide fraction of green coffee beans includes various saccharides and that partially methylated monosaccharides can be produced

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from such saccharides according to the Hakimori methylation procedure. Contrary to the Examiner's assertions in the Office action, however, Bradbury fails to disclose each and every limitation of claims 5-8.

Specifically, Bradbury does not teach, disclose, motivate or suggest a dietary supplement. Instead, Bradbury discloses the results of a study designed to characterize the whole polysaccharide fraction of green coffee beans. The Bradbury study involved the treatment of green coffee beans with analytical chemical reagents such as 4-methyl morpholine N-oxide and conducting the "Hakimori methylation procedure." The results of such treatment allowed the characterization of the polysaccharide fraction of such coffee beans but clearly did not result in a product suitable for ingestion much less a dietary supplement.

Bradbury also does not teach, disclose, motivate or suggest isolated and purified acetylated mannose. As noted above, Bradbury discloses that partially methylated monosaccharides may be produced by the Hakimori methylation procedure. However, acetylated mannose is an acetylated saccharide not a partially methylated monosaccharide. In addition, Bradbury includes absolutely no disclosure as to which of the constituent monosaccharides in coffee beans are partially methylated by the Hakimori methylation procedure. Bradbury simply does not report that green coffee beans were found to include acetylated mannose.

Moreover, Bradbury does not teach, disclose, motivate or suggest a composition that includes nutritionally effective amounts of acetylated mannose and at least five isolated and purified saccharides selected from: galactose, glucose, mannose, xylose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, arabinose, glucuronic acid, galacturonic acid, iduronic acid and arabinogalactan. Bradbury also does not teach, disclose, motivate or suggest the at least five isolated and purified saccharides are powdered, are essential saccharides or are selected from a group of saccharides that further includes glucosamine and rhamnose. Instead, Bradbury is a technical paper concerning the chemical analysis of the polysaccharide fraction of green coffee beans. While Bradbury reports, not surprisingly, that saccharides are found in the polysaccharide fraction of green coffee beans, Bradbury does not teach, disclose, motivate or suggest any compositions of isolated and purified forms of such saccharides.

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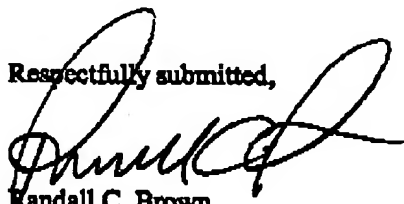
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For the foregoing reasons, it is clear that Bradbury fails to teach, disclose, motivate or suggest the subject matter of claims 5-8. Therefore, the rejection of claims 5-8 under 35 U.S.C. §102(b) over Bradbury is totally without merit and should be withdrawn.

**D. Conclusion**

It is believed that all matters set forth in the Office action have been addressed. Favorable consideration and allowance of claims 5-8 are respectfully requested. Should the Examiner deem that an interview with Applicants' undersigned attorney would expedite consideration of claims 5-8, the Examiner is invited to call the undersigned attorney at the telephone number indicated below.

Respectfully submitted,



Randall C. Brown  
Reg. No. 31,213

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HAYNES AND BOONE, LLP  
901 Main Street, Suite 3100  
Dallas, Texas 75202-3789  
Telephone: 214.651.5242  
Facsimile: 214.200.0853  
File: 23100.65